

## NOTICE TO KENTUCKY CAVE OWNERS

### “White Nose Syndrome – a new threat to cave bats”

**Cave Name:** \_\_\_\_\_

You are receiving this letter because you own one or more caves. If you have received this letter and do not own a cave or caves, please contact us (contact information can be found at the end of this letter) and we apologize for any inconvenience.

#### Background

In 2006, a mysterious fungus was discovered growing on the muzzles of several bats hibernating in a cave near Albany, New York, and the term “White Nose Syndrome” (WNS) was coined. Between 2006 and 2007, this syndrome spread to five caves in New York. Since then, WNS has spread to over 60 caves and mines in nine states in the northeast and eastern U.S. WNS has been associated with the deaths of approximately **1,000,000 bats** and that number continues to rise. Several bat species have been affected, including the federally endangered Indiana bat. **So far, this disease has not been found in Kentucky caves, and we want to do everything possible to keep it that way.** This letter is being sent to you to inform you of the problem and to ask for your help, as an owner of an important bat cave, to assist in keeping this problem out of Kentucky, if possible.

The U.S. Fish and Wildlife Service (USFWS) recently issued a cave advisory in states that are affected with WNS and those states adjacent to affected states. Because it was found in West Virginia and Virginia this year (2009), Kentucky is now considered an adjacent state. Kentucky Department of Fish and Wildlife Resources, USFWS Kentucky Field Office, and Kentucky Geological/Speleological Society have been working closely with cave groups and organizations through meetings to develop a state-specific response to this advisory. In Kentucky, non-commercial state and federally-owned caves have been temporarily closed to caving activities.

#### What we know

- Several species of bats are affected and it is estimated that over a million bats have been affected or have died from WNS
- Most affected bats have a white fungus on their face and low body weight
- Bat populations at affected sites have declined over 90% and the remaining bats are starving to death
- At some sites, cave owners reported bats flying outside during the winter
- White Nose Syndrome was found in caves in 2009 that were not affected in 2008
- As of April 2009, nine states are now infected with WNS

#### What we don't know.

- At this time we do not know the cause of the problem
- A fungus is apparent on the bats, but no one knows if the fungus is the cause of the problem or if it is a secondary infection caused by something else
- Several labs, including the Southeastern Cooperative Wildlife Disease Study lab, Cornell University lab, and the USGS disease lab in Madison, WI, are working on this problem

- We do not know how the disease is spread from bat to bat or from cave to cave. It may be spread via the air, soil, or water in the cave and then transferred from cave to cave by cavers
- Until we know more, we need to assume this is a possible means by which the disease spreads. If it is carried from cave to cave by the bats themselves, there may be little we can do
- At this time we do not know if there are risks to humans, but the potential risks to humans are being assessed
- Biologists working at affected sites in New York have not shown any signs of problems, but we cannot assume there are no risks to humans at this time
- Also, potential impacts to other wildlife species are not known

### **Implications for Kentucky bats.**

Several Kentucky caves are important hibernation sites for bats, including three federally endangered species: the Indiana bat, gray bat, and Virginia big-eared bat. Thousands of other caves are home to many other species of bats.

#### Virginia big-eared bats

Kentucky has the second largest hibernating population of Virginia big-eared bats in the country! A serious concern is that our population of Virginia big-eared bats hibernates in only a few caves during the winter, which leaves this species vulnerable to being entirely wiped out by WNS. Virginia big-eared bat populations in states that have WNS such as West Virginia and Virginia appear to be unaffected; however, these bats hibernate in caves with species affected by WNS.

#### Indiana bats

In the past few years, populations of Indiana bats in Kentucky caves have just started to show an increase thanks to cave protection efforts. However, Indiana bats continue to decline in many other parts of their range. Populations of Indiana bats in the northern states are currently being severely impacted by WNS. If populations in Kentucky become affected, the likelihood of recovery for this species could be greatly reduced.

#### Gray bats

There have been great strides made towards the recovery of the gray bat since it was first listed as endangered in 1976. Populations in Kentucky have been on the rise and in the summer, the species can be found in caves throughout the Pennyryle Region and a few in the Bluegrass. Unfortunately, this number has only grown slightly as approximately 95 percent of the entire gray bat population hibernates in only 17 caves in 5 states, Kentucky being one of them. This concentration makes them very susceptible to being wiped out quickly by WNS.

### **What can we do?**

1. Close bat caves to human traffic until we know more about how to contain this problem. This is the best precautionary step we can take at this time. The Kentucky Department of Fish and Wildlife Resources and U.S. Fish and Wildlife Service are preparing a list of the caves we feel should be voluntarily closed. Cavers will be asked to voluntarily stay out of these caves.
2. If, as a cave-owner, you would like to officially close your cave while we learn more about this problem, we will include your cave on the list of closed caves that will be posted on a website cavers can access. We have enclosed a self-addressed stamped envelope and a form to be completed by you as the cave owner. Please check that you would like to have your cave on the "Cave Closed" list and sign and date the form. The

list of closed caves will also be distributed to local caving groups. You can also contact Brooke Slack or Mike Armstrong (contact information below) for more information.

If you do not want your cave placed on the official closed cave list, we still plan to ask cavers to stay out of the cave **voluntarily** as we try to learn more about this problem. We have enclosed a self-addressed stamped envelope and form to be completed by you as the cave owner. Please check the "Cave Open" box and sign and date the form. If you allow cavers to enter your cave, we strongly recommend they clean their gear, clothing, and boots before entering the cave. A procedure for disinfection can be found at <http://www.fws.gov/northeast/wnsccavers.html>. **If cavers going into your cave have been caving in New York, Vermont, Massachusetts, Connecticut, New Hampshire, New Jersey, Pennsylvania, West Virginia, Virginia (states known to be affected as of June 2009) or any states adjacent to these prior to entering your cave, we highly recommend that they replace their gear and not use any gear/clothing/boots that has been used in potentially affected sites.** If this is not possible, they should disinfect their gear, clothing, and boots before going in to Kentucky caves following the protocols recommended by the USFWS. If cavers find WNS in your cave, please have them report it as soon as possible to Brooke Slack or Mike Armstrong.

3. If you do not respond within 14 days, we will consider your cave(s) temporarily closed.
4. Report any unusual bat activity at the cave, such as bats flying outside the cave during winter. Some bat activity on warm winter days is not unheard of, but large number of active bats would be unusual. If you find dead bats outside your cave, contact Brooke or Mike.

Bat populations are doing well in Kentucky caves thanks to the cooperation and assistance of cave owners like you willing to help protect this resource. Great strides have been made in the last 20+ years. We could be taking a giant step backward should WNS appear in Kentucky caves. Once it is here, there will be no going back. Your assistance at this time is greatly appreciated. We would like to have the initial list of closed caves available to the caving community as soon as possible, but the list can be updated later if you wish to change the status of your cave.

To get the latest information on White Nose Syndrome, visit:

[http://www.fws.gov/northeast/white\\_nose.html](http://www.fws.gov/northeast/white_nose.html)

Sincerely,

Brooke Slack  
Wildlife Biologist  
Kentucky Department of Fish and Wildlife Resources  
502-564-7109 ext. 4573

Mike Armstrong  
Endangered Species Biologist  
U.S. Fish and Wildlife Service  
502-695-0468 ext. 101

☐

I have read the enclosed letter informing me about WNS and the recommendations of the Kentucky Department of Fish and Wildlife Resources. I would like to close my cave or caves. Please include caves that I own on your "Cave Closed" list.

☐

I have read the enclosed letter informing me about WNS and the recommendations of the Kentucky Department of Fish and Wildlife Resources. At this time I am choosing to keep my cave or caves open to caving. I understand by doing this that I risk exposing my cave(s) to WNS.

---

Signature of Cave(s) Owner

---

Date